

## A CASE REPORT ON MANAGEMENT OF KARNASRAVA IN AYURVEDA

Dr. Roshini R.\*<sup>1</sup> and Dr. Sujathamma K.<sup>2</sup>

<sup>1</sup>Post Graduate Scholar, Department of Shalaky Tantra, Sri Kalabyraveswara Swamy Ayurvedic Medical College, Hospital and Research Centre, Bangalore.

<sup>2</sup>HOD and Professor, Department of Shalaky Tantra, Sri Kalabyraveswara Swamy Ayurvedic Medical College, Hospital and Research Centre, Bangalore.



\*Corresponding Author: Dr. Roshini R.

Post Graduate Scholar, Department of Shalaky Tantra, Sri Kalabyraveswara Swamy Ayurvedic Medical College, Hospital and Research Centre, Bangalore.

Article Received on 20/05/2024

Article Revised on 10/06/2024

Article Accepted on 01/07/2024

### ABSTRACT

Karnasrava is one among 28 karnaroga mentioned by Acharya Sushruta and the main characteristic feature of this disease is the srava resembling puya. It has a close resemblance with the disease chronic suppurative otitis media where the symptoms are ear discharge and hearing loss along with perforation. As the chronicity and recurrence rate is high and the complications are more and life threatening like intracranial and extracranial abscess, importance should be given to this problem. A 42 year old male patient came to the outpatient department of Shalaky tantra, SKAMCH & RC Hospital with a complaint of pus discharge and itching sensation along with reduced hearing in left ear since 3 months associated with ringing sound, headache on the same side of the affected ear, mild pain in Left ear since 2 weeks. Intervention & outcome: Ayurvedic treatment including internal medications along with sthanika chikitsa was given. After one month complete resolution of the tympanic membrane perforation was observed with complete relief in discharge and other symptoms.

**KEYWORDS:** CSOM, karnasrava, perforation, sthanika chikitsa.

### INTRODUCTION

Chronic Suppurative Otitis Media (CSOM) is defined as chronic inflammation of middle ear and mastoid cavity that may present with recurrent ear discharges or otorrhoea through a tympanic perforation. Incidence of this disease is higher in developing countries especially among societies with low socio-economic status because of malnutrition, overcrowding, poor hygiene, inadequate health care and recurrent upper respiratory tract infection. CSOM is initiated by an episode of acute infection.

Karnasrava is the disease were only puya srava is the symptom which resembles the features of CSOM. Karna is the seat of vata and any abnormality in vata will hamper it and will lead to karnaroga. The general line of treatment for karnarogas is ghratapana, avyayama, ashirasnana, brahmacharya, akathanam and rasayanasevana. External treatments like karnapramajana, karnaprakshalana, karnapoorana, avachurnana and karnapichu should also be followed.

In this case study karnapramarjana followed by karnadhupana was adopted along with internal medication which reduced the lakshanas of karnasrava and thus giving the effective results in healing tympanic

membrane perforation.

### CASE REPORT

A 42 year old male patient with a history of frequent attacks of cold since past 2 years suddenly experienced pain and mild itching sensation in his left ear 1 year back. He used some eardrops for the same from a nearby pharmacy and felt symptomatic relief for 4-5 days. Later he noticed gradual increase in pain and discharge from left ear. For which he sought treatment at a nearby clinic where he was prescribed medications, details of which are unknown. He found some relief with medication and was asymptomatic for 6 months. After six months, his symptoms worsened due to prolonged exposure to AC and cold weather and consulted an ENT specialist for the same complaints where ear wash was given and diagnosed a perforation in his left ear tympanic membrane. He was advised to undergo surgery along with oral medication and ear drops. But patient was reluctant to undergo surgery, so he took oral medication for 15 days and managed with ear drops for three months however, symptoms persisted. Since Past three months he noticed recurrent discharge, itching sensation and reduced hearing in the left ear. Patient observed ringing sound in left ear along with headache and pain on the same side of affected ear past 2 weeks. He used the same

eardrops prescribed earlier, but didn't find any further relief and seeking an alternative management for his condition, he consulted Shalakya OPD of SKAMCH & RC on 05/01/2024.

There is no history of similar complaints in his family. His personal history revealed that he follows a vegetarian diet and has a good appetite with regular bowel movements and sound sleep. The general physical examination showed that the patient has a moderate build and is moderately nourished. His vital signs include a temperature of 98.4°F, a pulse rate of 76 beats per minute, a respiratory rate of 17 cycles per minute, and a blood pressure of 120/80 mm Hg. The examination of the tongue showed it to be uncoated. There were no signs of pallor, icterus, edema, lymphadenopathy, or clubbing.

Additionally, the systemic examination of the respiratory, cardiovascular, central nervous, and gastrointestinal systems revealed no abnormalities.

#### EXAMINATION OF EAR

##### ➤ EXAMINATION OF PINNA AND ITS SURROUNDING AREA

	Right ear	Left ear
✓ Size	Normal	Normal
✓ Shape	Normal	Normal
✓ Position	Normal	Normal
✓ Redness	Absent	Absent
✓ Swelling	Absent	Absent
✓ Scar	Absent	Absent
✓ Ulceration	Absent	Absent

##### ➤ EXAMINATION OF EXTERNAL AUDITORY CANAL

	Right ear	Left ear
✓ Appearance	Normal	Hyperaemic
✓ Content	Clear	Profuse mucopurulent discharge +
✓ Swelling	Absent	Absent

##### ➤ EXAMINATION OF TYMPANIC MEMBRANE

	Right ear	Left ear
✓ Colour	Pearly white	Mild Congestion
✓ Position	Retracted	Retracted
✓ Cone of light	Dull	Absent
✓ Perforation	Absent	Small oval shaped perforation in anterosuperior quadrant of pars tensa part of TM

##### ➤ EXAMINATION OF MIDDLE EAR

	Right ear	Left ear
✓ Mucosa	Normal	Slight Hyperaemic
✓ Ossicle chain	Intact	Intact

##### ➤ EXAMINATION OF MASTOID

	Right ear	Left ear
✓ Swelling	Absent	Absent
✓ Obliteration of retroauricular groove	Absent	Absent
✓ Fistula	Absent	Absent
✓ Scar	Absent	Absent
✓ Discharge	Absent	Absent
✓ Tenderness	Absent	Absent

##### ➤ ASSESSMENT OF EUSTACHIAN TUBE PATENCY

	Right ear	Left ear
✓ On Valsalva maneuver	Patent	Not patent

##### ➤ AUDITORY FUNCTION TEST

	Right ear	Left ear
✓ Finger friction test	Audible	Audible
✓ Watch test	Audible	Audible
<b>VOICE TEST</b>		
✓ Whispered sound	Normal audibility	Reduced audibility
✓ Conversational voice	Normal audibility	Reduced audibility
<b>TUNING FORK TESTS</b>		
✓ Rinne's test	AC > BC (Positive)	BC > AC (Negative)
✓ Weber's test	Lateralized to left ear	
✓ ABC test	Same as examiner	Same as examiner

**> VESTIBULAR FUNCTION TEST**

✓ Nystagmus	Absent
✓ Romberg's test	Negative
✓ Fistula test	Negative

**> NOSE EXAMINATION**

Anterior Rhinoscopy : Nasal mucosa appears normal, midline septum, normal floor and cavity

**> PNS EXAMINATION**

Inspection : No signs of inflammations present in the

sinus areas.

Palpation : Tenderness present over the left maxillary sinus

**>THROAT EXAMINATION**

Inspection : Anterior pillar – congestion +

Tonsil – not enlarged

Posterior wall – normal

**THERAPEUTIC INTERVENTION**

The treatment was planned in 3 sittings considering the nature of the disease.

**1<sup>st</sup> sitting of treatment**

DATE	TREATMENT	DOSE	ROUTE	DURATION
5\1\24 – 11\1\24	Karna pramarjana with ajamutra arka	QS	Karna	Once in a day for 7 days
	Karna dhoopana with agaru	QS	Karna	Once in a day for 7 days
	Pathyadi khada	15 ml	Orally	Twice a day Anupana – warm water
	Haridra khanda	3 gm	Orally	Twice a day Anupana – warm milk
	Triphala Kashaya for Kavala	QS	Orally	4 times a day

**2<sup>nd</sup> Sitting of Treatment**

DATE	TREATMENT	DOSE	ROUTE	DURATION
15\1\24 – 21\1\24	Karna pramarjana with ajamutra arka	QS	Karna	Once in a day for 7 days
	Karna dhoopana with agaru	QS	Karna	Once in a day for 7 days
	Pathyadi khada	15 ml	Orally	Twice a day Anupana – warm water
	Sarivadi vati	2	Orally	Twice a day Anupana –water
	Triphala Kashaya for Kavala	QS	Orally	4 times a day

**3rd sitting of treatment**

DATE	TREATMENT	DOSE	ROUTE	DURATION
25\1\24 – 3\2\24	Karna dhoopana with agaru	QS	Karna	Twice in a day for 10 days
	Instillation of ajamutra arka in left ear	2-3 drops	Karna	Once in a day for 10 days
	Cap. Brahmvite forte	1	Orally	Twice a day Anupana- water
	Sarivadi vati	2	Orally	Twice a day Anupana –water
	Triphala Kashaya for Kavala	QS	Orally	4 times a day

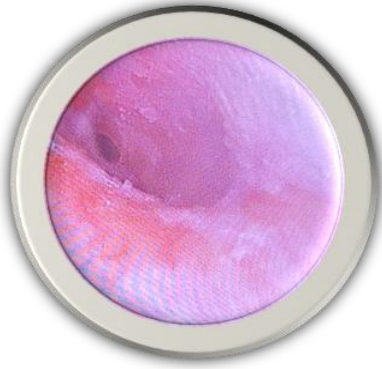
PATHYA : Mudga, Yava, Purana gritha, Karavellaka, Ushna jala sevana, Cotton should be kept in ears.

APATHYA : Dadhi, Swimming, Atibashana, Avashyaya, Shirasana, Vyayama, Sheetambupana, Scratching of ear, Exposure to AC.

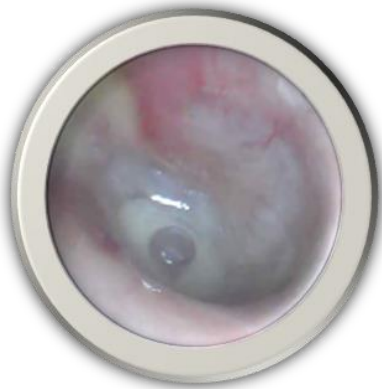
the left ear. During follow-up, there was no recurrence of symptoms. The patient was advised pathya ahara and vihara including avoiding head baths, refrigerated food items, and exposure to cold wind. Additionally, it was emphasized that the ear canal should be kept dry.

**OBSERVATION AND RESULTS**

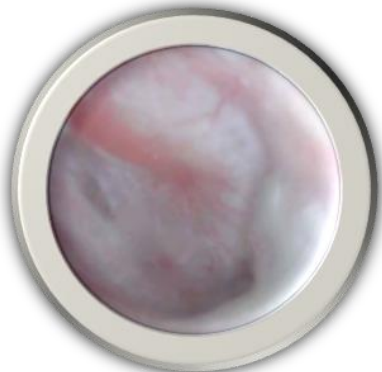
The patient was assessed using both objective and subjective parameters as outlined in Ayurvedic and modern medical texts. After one month of treatment, the discharge from the left ear had completely ceased. The small perforation in the antero-superior quadrant of the pars tensa part of the tympanic membrane had fully healed. The patient experienced relief from itching, reduced hearing, ringing sounds, headache, and pain in



Taken on previously consulted clinic



Before Treatment



During Treatment



After Treatment

## DISCUSSION

In Ayurveda, Karnasrava is described both as a symptom and as a disease. According to Acharya Sushruta, the samprapti (pathogenesis) of Karnasrava involves the avarana (obstruction) of vata by other doshas, which is the primary factor initiating the pathology. The clinical features such as discharge, pain, and itching sensation can be attributed to Kapha Aavrita Vata Dosha. Regarding prognosis, Acharyas have noted that wounds (vrana) situated in the skin (twak) and muscles (mamsa), as well as wounds in the ear (karna), are considered easily treatable (sukhasadhya). In Uttaratantra, Acharya Sushruta specifically regards Karnasrava as a treatable condition (sadhyaaroga).

## MODE OF ACTION OF DRUGS

### Karnapramarjana

The primary purpose of Pramajana is Sroto Shodanartha, which facilitates the removal of puya (discharge). Karnapramarjana involves dry mopping using the application of Ajamutra Arka. Ajamutra possesses katu (pungent), ushna (hot), rooksha (dry), ksharana (corrosive), shodana (purifying), ropana (healing), krimihara (antimicrobial), and shothahara (anti-inflammatory) properties. These properties aid in the drying (shoshana) of kleda in the ear canal, thereby reducing ear discharge. It helps in samprapti vighatana as Ajamutra balances all three doshas (tridosahara), while Karnasrava is a tridoshaja vyadhi. The krimihara property acts against microorganisms, reducing infection. The shothahara property combats inflammation and decreases the increased glandular activity of the middle ear mucosa. Its ushna and ksharana properties facilitate the scraping (lekhana) of the squamous epithelium from the margins of the perforation, promoting healing. The shodana property aids in vranashodana, accelerating the healing process.

### Karnadhoopana

It is a method of fumigating the ear with the smoke of anti-infective drugs like agaru. Agar, which has pungent (katu), light (laghu), bitter (tikta), and sharp (teekshna) properties, is effective in treating ear diseases (karnarogahara), cleansing wounds (vrana shodhana), and promoting wound healing (vrana ropana). These properties help dry up the discharge and promotes the healing of tympanic membrane perforations. Agar contains agarospirol, a volatile oil with antimicrobial, antifungal, and antiviral properties.

### Kavala

Kavala is the procedure of swishing medicated liquid inside the mouth. The middle ear is connected to the throat by the Eustachian tube, which is lined with mucous. Performing kavala helps to clear the blockage of the Eustachian tube, thereby alleviating negative pressure and tympanic membrane retraction. This action ventilates the middle ear cleft and resolves Karnasrava. Triphala kashaya, with its antibacterial properties, helps to combat the infections.

**Pathyadi khada**

Pathyadi Khada, a well-known formulation from Sharangdhara Samhita, is used for treating all Urdhwajatrugata vikaras. Its ingredients include Haritaki, Bibhitaki, Amalaki, Nimba, Bhunimba, Guduchi, and Haridra. This formulation balances Vata and Kapha doshas and also acts as karnashulahara.

**Sarivadi vati**

Sarivadi Vati, an Ayurvedic preparation mentioned in Bhaishjya Ratnawali under Karnaroga Chikitsa, includes ingredients such as Sariva, Madhuka, Kushtha, Chaturjata, Priyangu, Nilotpala, Guduchi, Lavanga, Triphala, Lauha Bhasma, Abhraka Bhasma, and the swarasa of Bhringraj, Kakmachi, Gunja, along with a decoction of Arjuna. Most of these ingredients predominantly pacify Vata and Kapha doshas, act as rasayanas, and alleviate indriya dourbalyata (weakness of the senses).

**Haridra khanda**

Haridra Khanda, rooted in ancient Ayurvedic texts, is renowned for its tridosahara property. Its ingredients include haridra, trivrut, nagarmotha, haritaki, daruharidra, ajmoda, chitrakmoola, trikatu, and guduchi. Haridra Khanda's anti-allergic properties aid in pratishyaya, while its antipruritic, antihistamine, anti-inflammatory, and blood-purifying attributes effectively relieve itching.

**Brahmivite forte**

Brahmivite Forte capsules contains Brahmi as their primary ingredient. Possessing tikta, kashaya, and laghu properties, it balances Vata and pacifies Pitta. Through its srotosodhana action, it nourishes the nerves and indriyas. Brahmi also exhibits antioxidant, anti-inflammatory, and analgesic properties, protecting against chronic diseases when it is used regularly.

**CONCLUSION**

The treatment protocol adopted in the case of karnasrav, which includes karna pramarjana, karna dhupana, and triphala kashaya kavala along with oral medications, plays a significant role in alleviating the signs and symptoms associated with this disorder.

**REFERENCES**

1. Acarya Jadavaji Trikamji., editor. Nibandhasangraha Commentary of Shri Dalhanacarya. 7th ed. 3-5. Vol. 20. Varanasi: Chaukhamba Orientalia; 2002. Sushruta, Sushruta Samhita, Uttara Tantra.
2. Dhingra P. L., Shruti Dhingra and Deeksha Dhingra. Disease of ear, nose and throat & Head and neck surgery. 6 ed. India; Elsevier Inc, 1992.
3. Mishra SN, Sridhiprada Hindi Commentary on Bhaishjya Ratnawali, Chaukhamba Surbharati Prakashan, Varanasi Edition 2015, Chapter 62, verse 69-74, 174-175.
4. Tripathi B, editor. Ashtanga Hridayam, Sutra sthan chapter 20, verse 1, Chaukhamba Sanskrit Pratishthan, Delhi, 2009; 244.
5. Sushruta Samhita, with Sri Dalhanacharya Teeka, edited by Narayan Ram Acharya Kavyathirtha, Chaukhamba Orientalia, Varanasi, reprint edition-2009, Sutra sthana, 1st chapter, Verse-7(2), 824, 2.
6. Agnivesha, Charaka Samhita, Revised by Charaka and Dridhabala, Ayurveda Dipika Commentary of Chakrapani Datta, Edited by Vaidya Jadavji Trikamji Acharya, Chowkhamba Krishnadas Academy, Varanasi, Reprint-2010, Sutra Sthana, 8th Chapter, Verse-3, 738, 55.
7. Ashtanga Hridaya with commentaries Sarvangasundari of Arunadatta and Ayurvedarasayana of Hemadri, Annotated by Dr Anna Moreshwar Kunte and Krishna Ramachandra Shastri Narre, edited by Pt. HariSadasiva Sastri, Chaukhamba Surabharati Prakashan, Varanasi, Edition 2008, Uttarantra, 17th chapter, verse-42, 956, 735.
8. A textbook of Shalaky Tantra, Vol.2, Karna, Nasa, Shiro and Mukha Rogas, Dr. Adikanda Biswal, Dr. Rasmita Routaray – Chaukhamba publications, New delhi – Reprint edition., 2020; Chapter – 2.